

ABSTRACT OF THE DISCLOSURE**NUCLEIC ACIDS ENCODING G PROTEIN-COUPLED RECEPTORS**

The present invention provides novel GPCR polynucleotides, GPCR polypeptides, gene delivery vehicles comprising and/or expressing the GPCR polynucleotides, antibodies and fragments capable of specifically binding to the GPCR polypeptides, and modulators of the GPCR. Also provided by the invention are host cells, transgenic organisms comprising the gene delivery vehicle of the present invention. Further provided are methods of using these compositions for diagnosis and treatment of GPCR associated diseases.